

CLAIMS

What is claimed is:

1 1. Telecommunication apparatus for initiating and receiving voice and data
2 calls, comprising:

3 a first port to connect said apparatus to a circuit switched telecommunication
4 network;

5 a second port to connect said apparatus to a packet based telecommunication
6 network; and

7 gateway means for establishing a path between said first port and said second
8 port inside said apparatus in response to a request imbedded in an incoming call via
9 said second port.

1 2. Telecommunication apparatus according to claim 1, further comprising a
2 third port to connect a conventional telephone apparatus via said telecommunication
3 apparatus to said first port.

1 3. Telecommunication apparatus according to claim 2, further comprising a
2 mechanism to automatically connect said third port directly to said first port in the event
3 of power failure.

1 4. System for telecommunication utilizing both a circuit switched
2 telecommunication network and a packet based telecommunication network,
3 comprising: multiple telecommunication apparatuses for initiating and receiving voice
4 and data calls, each said telecommunication apparatus having
5 a first port connected to said circuit switched telecommunication network;
6 a second port connected to said packet based telecommunication network; and
7 gateway means for establishing a path between said first port and said second
8 port inside said telecommunication apparatus in response to a request imbedded in an
9 incoming call from the packet based telecommunication network, whereby said
10 telecommunication apparatuses can serve as part of a distributed gateway system
11 between said circuit switched telecommunication network and said packet based
12 telecommunication network.

1 5. System for telecommunication according to claim 4, further comprising
2 gateway location servers connected to said packet based telecommunication network,
3 said gateway location servers being adapted to receive a request from a first
4 telecommunication apparatus connected to said packet based telecommunication
5 network for telecommunication with a specified telephone apparatus on said circuit
6 switched telecommunication network, and further being programmed to select a
7 second of said telecommunication apparatuses to serve as gateway between said
8 networks for said requested connection, and to forward said request to said second
9 telecommunication apparatus via said packet based telecommunication network.

1 6. System for telecommunication according to claim 4, wherein the packet
2 based telecommunication network comprises the Internet.

1 7. System for telecommunication according to claim 5, wherein the packet
2 based telecommunication network comprises the Internet.